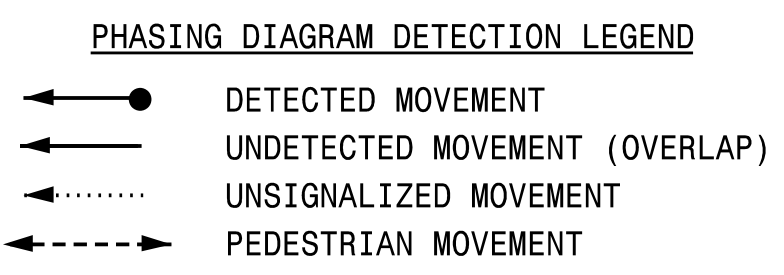
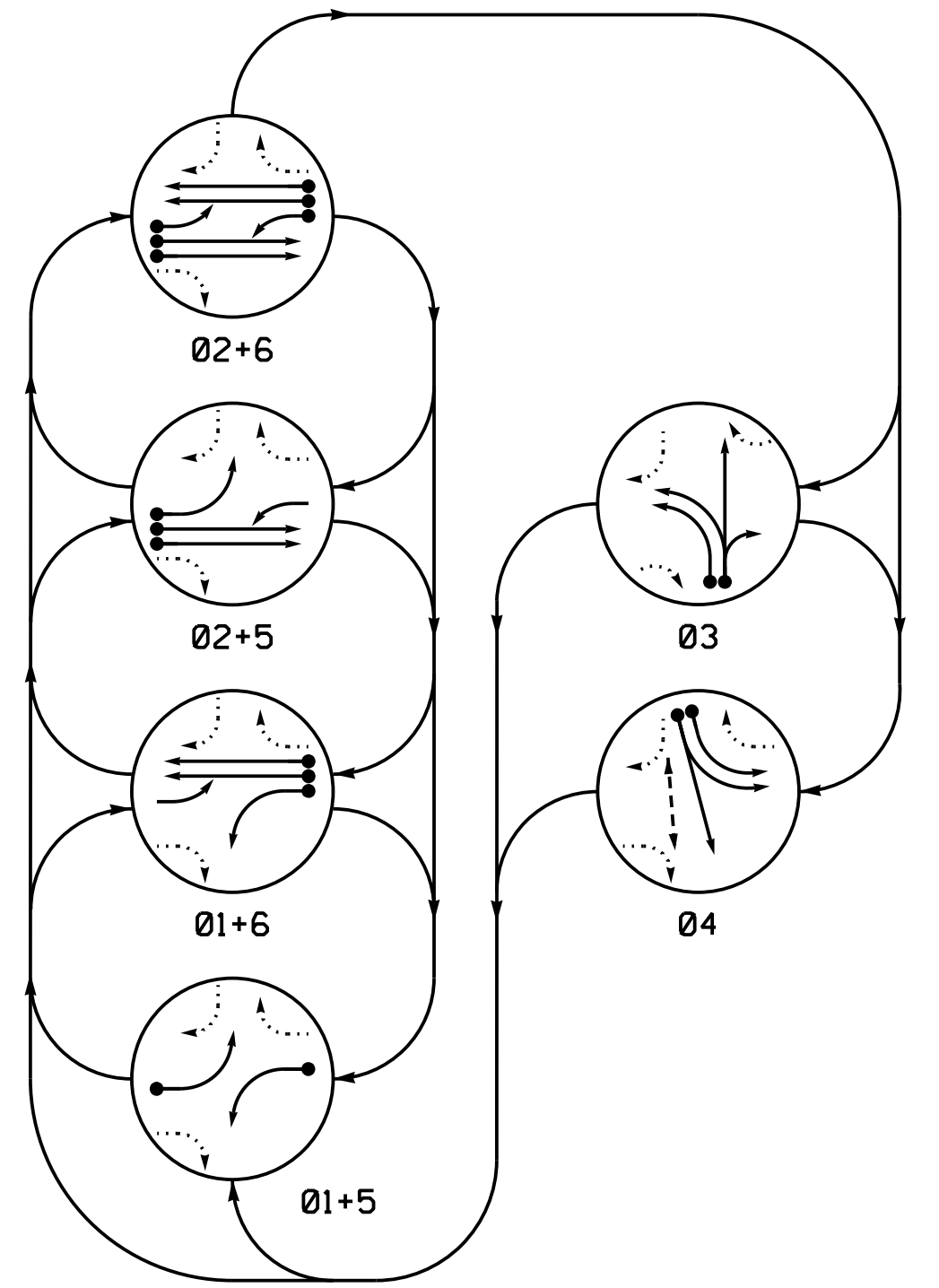


PHASING DIAGRAM



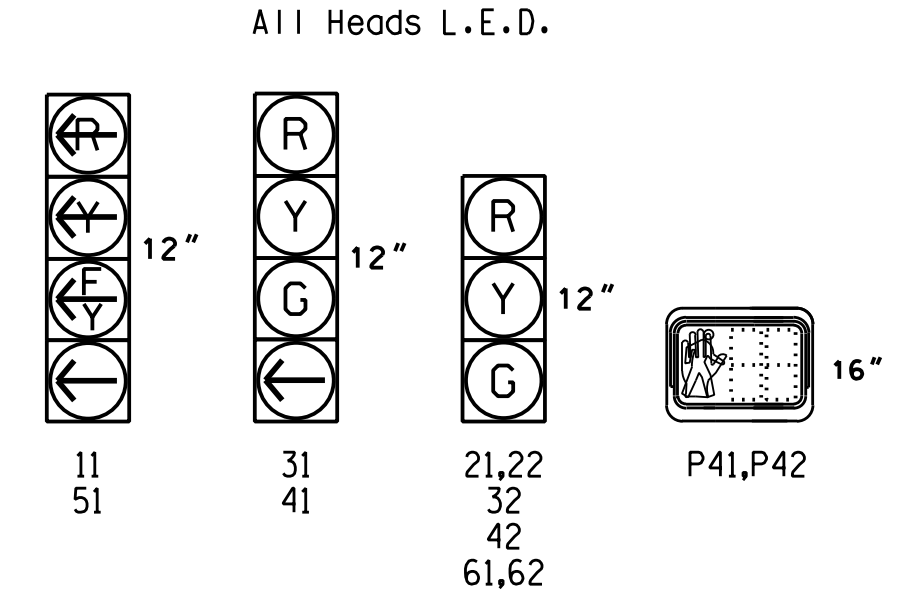
EV PREEMPT PHASES
(Medium Priority)



TABLE OF OPERATION

SIGNAL FACE	PHASE									
	01+5	01+6	02+5	02+6	03	04	PRE	EV	FL	ISOL
11	-	-	E	E	R	R	R	R	-	-
21,22	R	R	G	G	R	R	R	R	Y	-
31	R	R	R	R	G	R	R	R	-	-
32	R	R	R	R	G	R	R	R	-	-
41	R	R	R	R	R	G	G	R	-	-
42	R	R	R	R	R	G	G	R	-	-
51	-	E	-	E	R	R	R	R	-	-
61,62	R	G	R	G	R	R	R	Y	-	-
P41,P42	DW	DW	DW	DW	DW	W	DW	DRK	-	-

SIGNAL FACE I.D.



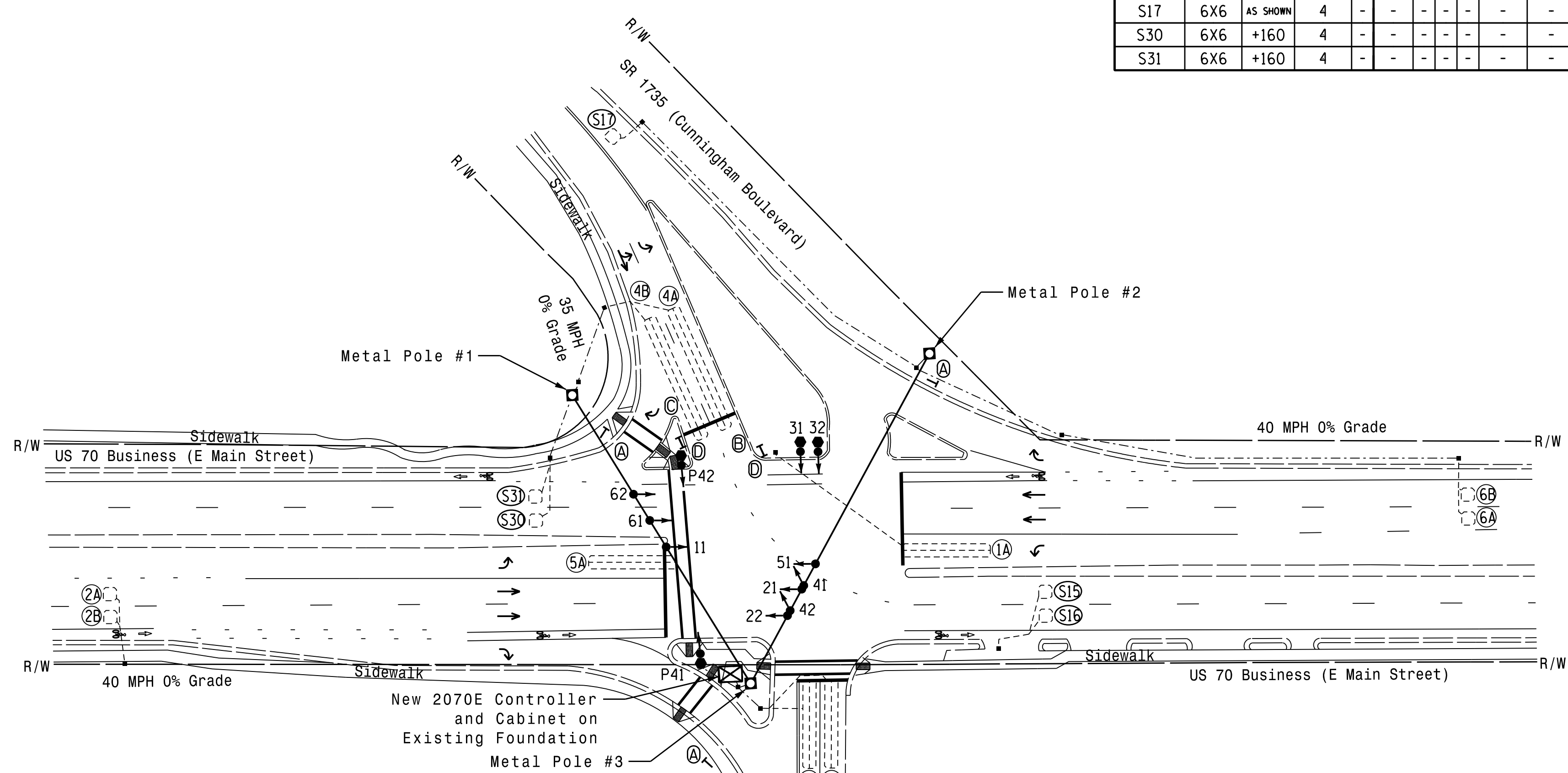
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY		
1A	6X40	0	2-4-2	-	1	Y	Y	-	15	-
2A,2B	6X6	250	4	-	2	Y	Y	-	3	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-
3B	6X40	0	2-4-2	-	3	Y	Y	-	5	-
4A	6X60	+5	2-4-2	-	4	Y	Y	-	-	-
4B	6X60	+5	2-4-2	-	4	Y	Y	-	5	-
5A	6X40	+5	2-4-2	-	5	Y	Y	-	15	-
6A,6B	6X6	255	4	-	6	Y	Y	-	-	-
S15	6X6	+170	4	-	-	-	-	-	-	Y
S16	6X6	+170	4	-	-	-	-	-	-	Y
S17	6X6	AS SHOWN	4	-	-	-	-	-	-	Y
S30	6X6	+160	4	-	-	-	-	-	-	Y
S31	6X6	+160	4	-	-	-	-	-	-	Y

6 Phase Fully Actuated w/ EV Preempt Havelock US 70 Business CLS

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Renumber existing loops 2B,2C,6B, and 6C as 2A,2B,6A, and 6B, respectively.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
- Pavement markings are existing.
- The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell Min Green time for the emergency vehicle preemption timing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #0190

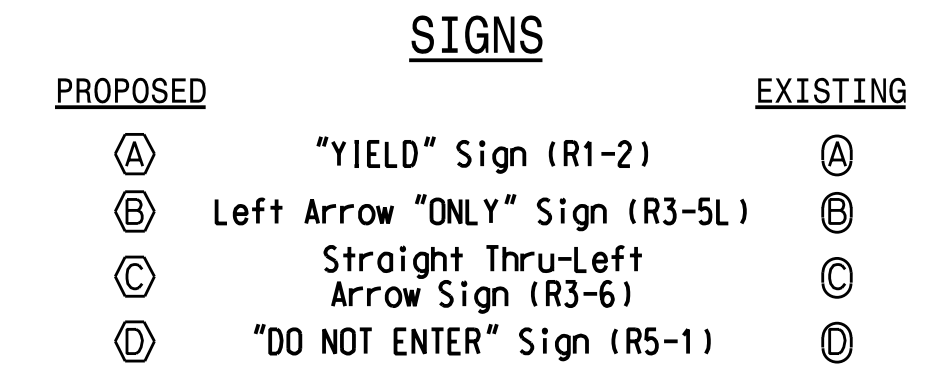
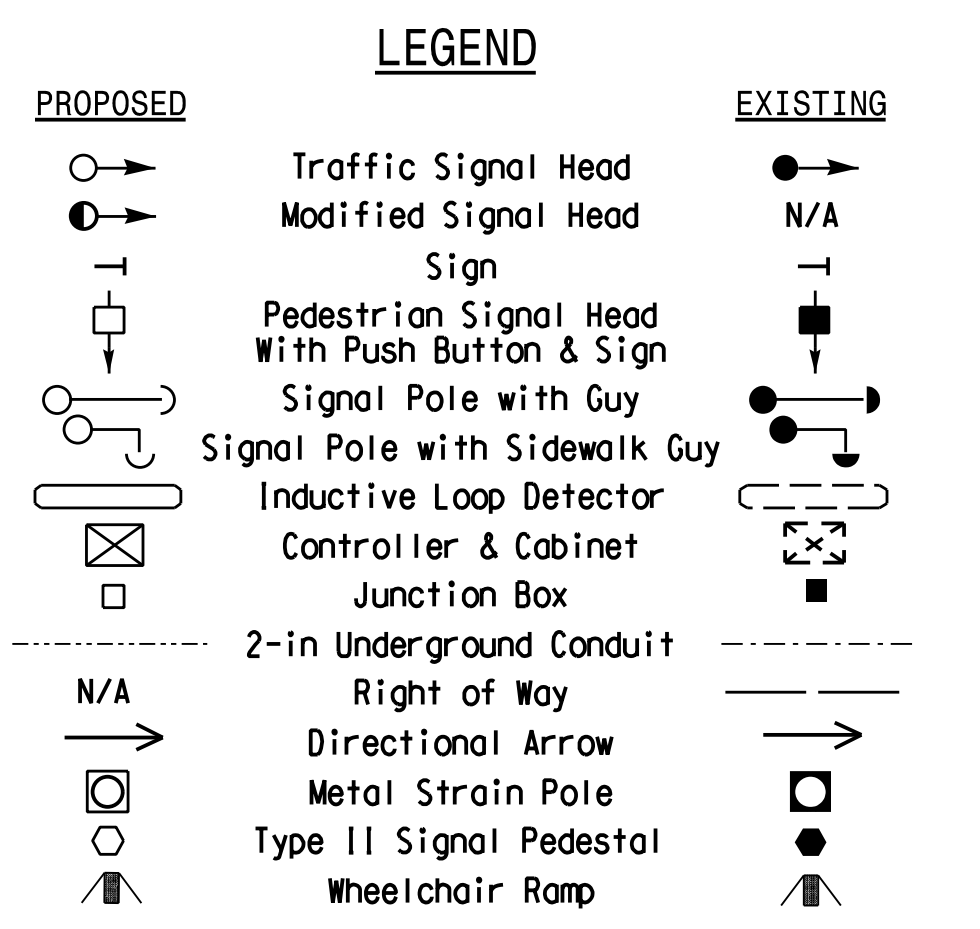


OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	2.0	6.0	3.0	3.0	2.0	6.0
Max Green 1 *	20	75	35	35	20	75
Yellow Clearance	3.0	4.2	3.2	3.8	3.0	4.2
Red Clearance	2.4	1.9	3.2	2.6	3.1	1.9
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	7	-	-
Don't Walk 1	-	-	-	20	-	-
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	29	-	-	-	30
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
Minimum Gap	-	3.0	-	-	-	3.0
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON	ON	ON

OASIS 2070 EV PREEMPT

FUNCTION	PRE 2
Interval 1 - Dwell Green	255
Interval 1 - Dwell Yellow	0.0*
Interval 1 - Dwell Red	0.0*
Interval 5 - Exit Green	1
Interval 5 - Yellow	0.0
Interval 5 - Red	0.0
Exit Phase(s)	2,6
Priority	Medium
Delay Time	**
Min Green Before Pre	1
Ped Clear Before Pre	0*
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	**
Enable Backup Protection	N
Ped Clear Through Yellow	Y
Omit Overlaps	-
Preempt Extend	-



* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

** Time defaults to time used for phase during normal operation See Note 10

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	US 70 Business (E Main St) at SR 1735 (Cunningham Boulevard)/ Annunciation Catholic School		
	Division 02 Craven Co. Havelock	PLAN DATE: March 2018	
PREPARED BY: A.H. Thornburg	REVIEWED BY: N.R. Simmons	REVISIONS	DATE
SCALE: 0 40 1"=40'	DocuSigned by: Natasha R. Simmons	DATE: 12/7/2018	SIG. INVENTORY NO. 02-0190